



If you are planning to purchase a building lot for a new home, investigate before you invest. If a public sewer system is not available, you may need a septic-tank-soil-treatment system (septic system) to treat and dispose of sewage from the home you plan to build on the land. If a septic system is needed, consider these steps before you purchase land:

- ☐ *Determine the types of soils on the lot.*
- ☐ *Find out what type of septic system, if any, will work on those soils.*
- ☐ *Obtain a septic system improvement permit (IP) from your local health department*
- ☐ *Obtain a cost estimate for installing the kind of septic system you need. Ask about the operating requirements and maintenance costs for the system.*

Soil Facts

Investigate Before You Invest

Most homes in rural and outlying suburban areas depend upon an individual septic system for wastewater disposal. This system typically consists of a thousand-gallon-capacity septic tank buried in the ground and a drainfield that can fit within the front yard or backyard of the home-site. Household wastewaters from the kitchen, bathrooms, and laundry area flow into the septic tank where the solids are retained. The liquid flows out of the tank to the drainfield where it leaches through the soil and is purified before reaching the groundwater.

Unfortunately, not all soils can absorb wastewater or purify it. Septic systems that are installed in unsuitable soils usually malfunction by leaking raw, untreated sewage to the soil surface or a roadside ditch, or by contaminating the groundwater. The sewage may contain deadly bacteria and viruses. It can be expensive to remedy the odor problems and potential health hazards that result from the use of septic systems in unsuitable soil. Thus, state law requires a comprehensive soil and site evaluation by the local health department to determine the suitability of the soils and topography of the lot. An improvement permit *must* be obtained from the local health department before construction begins on the home or the septic system.

If you are comparing a number of lots, apply for a permit for each lot. However, if application costs or

time constraints make this impossible, you may wish to preview the lots yourself and eliminate ones with obvious problems. A professional consultant with experience in soils evaluation can provide helpful input for your decision. Then, apply for a permit for those lots that show the greatest potential. The following steps can help you screen the lots and determine their suitability.

Reviewing the Lot

Before you invest, walk over each lot and look for indications of soil problems or site limitations that could affect the performance of a septic system.

- ☐ Are there gullies, ravines, excessively steep slopes, or other topographic problems that would make it difficult to install a system?
- ☐ Is the land next to a stream or river that could flood it?
- ☐ Does the land seem wet and swampy?
- ☐ Does the land contain designated wetlands? Has the extent of any designated wetlands been mapped on the property?
- ☐ Are parts of the land rocky? (Bedrock would interfere with the installation and operation of a septic tank system.)
- ☐ Is there enough space on the building lot for the home, the septic system, and, if needed, a water-supply well?